

THE
BOSTON MEDICAL AND SURGICAL
JOURNAL.

VOL. X.]

WEDNESDAY, APRIL 2, 1834.

[NO. 8.

THE SPIRIT OF DAVY AND OF FRANKLIN.

It is only for the want of the SPIRIT, not the genius, of Davy or Franklin, that the career of improvement is not ten times as rapid as it has hitherto been. No doubt thousands of valuable facts are observed, wondered at, and forgotten, without a single effort to draw them into the service of society. This is rendered clearer by the truth that the most important improvements in the arts have been made by those who have pursued avocations remote from the business into which these improvements have been introduced, and who had of course little opportunity for observation or example. Arkwright, the inventor of the spinning jenny, was a barber; and Watt, the immortal author of the present steam-engine, was a philosophical-instrument maker. Papin, who invented the digester and safety valve, was a doctor of medicine; Savery, who produced the first steam-engine, was commissioner of sick and wounded soldiers; Newcomen and Cawley, authors of the atmospheric engine, were, the one an ironmonger, and the other a glazier. The inventor of the air-pump, Otto de Guericke, was burgomaster of Magdeburg. The projector of that invaluable instrument, the mariner's compass, was John di Gioja, a nobleman of Amalphi in the kingdom of Naples. Fahrenheit, who first applied mercury to thermometric uses, was a bankrupt merchant. Ferguson, the astronomer, was a shepherd, and afterwards a miniature painter; Godfrey, of quadrant fame, was a common glazier; and Dr. Priestley, the great mineralogist Haüy, and Cartwright who invented the powerloom, were clergymen. Rittenhouse was a farmer, and entirely a self-taught mechanician; Franklin was at first a tallow-chandler, and subsequently a printer; and Fulton a portrait painter. John Hunter, who created a new era in surgery, commenced life as a cabinetmaker. The greatest engineers whom the world ever saw, are Rennie and Telford. To them is Great Britain indebted for a greater amount of her present prosperity, than perhaps to any other individuals living. Yet these men were common stonecutters, both of them educated to the manual labor of dressing stones. The last of the great inventions in steam machinery, is that which enables steam to propel locomotives on common roads. The credit of this invaluable discovery belongs to a practitioner of medicine and a chemist, of Cornwall, in England. Dr. Gurney has already acquired distinction by bringing his fine conception into useful action; but when we look forward to the time, which will assuredly come, when the traveller and his goods will be conveyed by land with as much ease, and with more safety, than at present by water; when we perceive that roads may be made in almost every direction, and in adequate number, we shall have a better estimation of the magnitude and momentous cha-

racter of the experiments to which alone, unaided, and under every discouragement, this second Fulton resolutely and confidently appealed. This very generation will do him full justice, for, in a very few years, horses will nearly disappear from our great roads, and almost every one will travel by steam. Scarcely one of the many surprising and beautiful inventions of the prolific genius of New England, has been made by those practically familiar with the art to which it is auxiliary. The reason of this apparent paradox seems to me obvious. Even there, in intellectual New England, where all else is philosophy, a trade is taught practically, and solely so. It is carefully divested of philosophy, and is made, as far as possible, merely mechanical. There is a dull routine through which every apprentice travels to the station of a journeyman. The less he thinks, the more he will work, and the more immediately profitable will be his labor. When once the circle has been completed, its dull, unvarying round is again and again traversed, until a deviation would be irksome. A man thus trained to the habitual exclusion of curiosity and understanding, although he may make a very good thinker in other matters, cannot readily apply his reason to the familiar labors of his vocation. When very young, I had occasion to observe the labors of a very sensible man, who pursued the business of a carpenter. At that time he was frequently employed in sawing out square apertures in boards, and always bored three holes at the points where were to be placed three angles of the square. These augur-holes were made for the introduction of a saw. I immediately perceived that two augur-holes would suffice, and inquired how many holes were necessary to effect his purpose. Instantly, aye, *instantly*, he saw that two were as good as three, and with a sigh lamented that, *as he had been taught*, he had bored thousands of unnecessary holes, and wasted much valuable time.

The absence of philosophical curiosity and spirit prevents, not only the proper use of new facts elicited by accident, but the scientific deductions, by which important novelties may be indefinitely increased. A merely practical acquaintance with a trade renders one insensible to its defects, and ignorant of its capacities of improvement. A merely theoretic cultivation of it, encourages impracticable speculations, and hinders us from carrying even beneficial suggestions into useful operation. Hence the most advantageous position in which a mechanic can be placed, is that which combines knowledge of principles, and familiarity with practical detail; intellectual comprehension, and manual dexterity; the power to conceive, and the ability to execute. But to reach this enviable condition, he must take care to think, as well as work, and never suffer any process to pass, without considering it as a philosophical experiment, illustrative of some general principle; for such is in truth every act of mechanical labor.

Nor should he remain satisfied with anything, merely because it is the practice of others, and take it for granted that any process is as perfect as it may be rendered. I believe that discoveries have been very frequently postponed by the neglect to ask the simple question, "Is this instrument or this process as perfect as it can be made?" It is not so much the want of talent, as of the spirit of inquiry, that has retarded so frequently the progress of improvement. Of this fact we have many remarkable proofs. When Arkwright practised the trade of a barber, he

formed an acquaintance with a neighboring spinner, who had *discovered a want*. It was the want of machinery with which to spin cotton. That suggestion induced Arkwright to go to work on the subject, and he soon supplied the want, accumulated a fortune, became a baronet and high sheriff of an English county. A conversation relative to the discovery of Arkwright taking place in the presence of a clergyman of the name of Cartwright, one of the party said, "We now want an invention by which we can weave without hand." Cartwright had not seen a loom, but resolved to discover a method of weaving by water or steam. In this, he so well succeeded, as to receive from the British Parliament, for the invention of the power-loom, nearly fifty thousand dollars. When Sir Humphrey Davy published his expensive and imperfect method of obtaining potassium, Guy Lussac and Thenard perceived the want of a better method, and instantly devised the one which is now used.

Dr. J. K. Mitchell on Practical Chemistry.

REMOVAL OF ENLARGED TONSILS.

To the Editor of the Boston Medical and Surgical Journal.

New York, March 18, 1834.

SIR,—Observing in a late number of your work an inquiry concerning the mode of operating for the removal of enlarged tonsils, I take the liberty to enclose to you a brief account of an instrument invented by my much esteemed friend and family physician, Abraham L. Cox, M.D. of this city. I never look upon my beloved eldest son, now growing up tall and healthy, in his 13th year, and then recur to the period of his first coming under the hands of Dr. Cox, without feeling a gush of gratitude, both to him and to God, and a sense of obligation to diffuse the knowledge of this easy remedy as widely as possible.

Yours respectfully,

JOSHUA LEAVITT.

PRACTICAL REMARKS ON ENLARGED TONSILS, WITH A NEW APPARATUS FOR THEIR REMOVAL. BY ABRAHAM L. COX, M.D.

Enlargement of the tonsil is an exceedingly prevalent complaint, and is sometimes the unsuspected cause of habitual quinsy, partial deafness, a peculiar guttural change in the voice, and continual difficulty of deglutition and respiration.

In many recent and transient swellings of these glands, no operation whatever is necessary; and in others of considerable tumefaction and inflammation, slight scarifications produce the most perfect relief.

There are cases, however, where, from the frequent recurrence of inflammations, or from some idiosyncrasy of constitution, these tumors become permanently enlarged, and occasion the symptoms already mentioned.

Partial deafness results from the pressure of the glands upon the orifice of the eustachian tube. Difficulty of deglutition is the consequence of the glands being themselves acted on by every attempt at swallowing. This occasions pain and inflammation in the surrounding tissues, and an aggravation of all the symptoms.

Sometimes the obstruction to respiration produces death. I was told

by a medical gentleman who saw the patient, that this result occurred in this city within the last two years. He said that the surgeon, who attempted to remove the swollen gland by a ligature, was forced to desist, in consequence of the patient being threatened with immediate suffocation when an attempt was made to tighten the noose of the wire. The case was consequently abandoned, and the child became a victim to his disease. Similar danger I once saw, in the case of an old gentleman (perhaps seventy years of age) under the care of Dr. Physick, and my preceptor, Dr. Parrish, of Philadelphia. He came from the country to obtain relief from this disease, under which he had labored nearly all his life. He had paroxysms of difficulty of respiration, in which he appeared to be in imminent danger of suffocation. The glands had become very much elongated, were habitually swallowed, and adhered their whole length to the side of the throat; hence, great difficulty was experienced in including them in a ligature. After several unsuccessful efforts, Dr. Physick at length was able to apply it round one of the glands; but the patient appeared in great suffering and danger from the operation. For a long time, his breathing was excessively difficult; the face was livid and tumefied; and, though he recovered, to me he seemed to have incurred no inconsiderable hazard of life.

Great constitutional irritation and fretfulness of temper often accompany, in children, this disease; and the development of the intellectual faculties, as well as the growth of the body, is injured from the same cause. It often happens that children who are troubled but slightly in this way, when attacked with inflammatory diseases, as catarrh, scarlatina, measles, &c., suffer so great an enlargement of the tonsils, as not only to leave a very serious complaint, but very much to diminish the probability of their recovery, or greatly to contribute to the fatal termination of the case. Such is the unfortunate situation of a little patient now under my care. He has had scarlatina; but from the increased obstruction to respiration, the difficulty of swallowing, the impediment to the return of venous blood from the head, and the general irritation he endures, I cannot but fear for the result—that he will become a victim to their combined effects.

It is sometimes asked whether it would not be preferable, in children, to trust the case to the spontaneous change which nature produces in the progress of the constitution to maturity; or, in other words, to depend on the child's outgrowing the complaint. It must be admitted that, in many cases where the enlargement exists in infancy, the natural development of the size of the throat removes the glands farther apart, and prevents that mechanical irritation which, at an early period, they produced on each other. In this way the tumefaction subsides, and perfect recovery follows. On the other hand, as in one of the cases already mentioned, we have an instance of the duration of the disease through a long lifetime, and, in old age, the patient was glad to submit to an operation rendered more severe by delay; and which, if performed in early life, would have secured to him years of health and enjoyment, which were passed in continual suffering and apprehension.

In all cases of doubt about the propriety of removing these glands in early life, where much suffering exists, if it were possible to effect an immediate removal by an operation free from pain and danger, it appears

to me that no real objection could be urged against it. Such an operation I wish to recommend to the profession.

In some instances, the spontaneous cure itself is effected by a process most severe, and generally unsuspected, viz. the entire removal of the glands by frequent suppurations. A lady whom I know, was subject to severe and repeated attacks of quinsy during the early part of life. Abscesses formed in the throat, and were permitted to break. Her sufferings were indescribable, and were renewed by every change of weather, during five or six successive winters. No efficient treatment was, at any period, adopted; but, after this time, she was entirely exempt from her suffering. The present state of her throat explains perfectly how this result was effected. The space between the lateral half arches, occupied by the tonsils in the natural condition of the parts, is perfectly smooth. There are no remains of these organs. They have been ulcerated away; and the disease has thus painfully and tediously effected what a skillful operation would have done instantly without danger.

In another instance, where a patient had, during every winter, suffered from severe quinsy, the operation performed by the ligature on her tonsils produced complete immunity from further disease. This lady, a wealthy and respectable woman, assured the surgeon, that, besides all her suffering during the preceding ten years, it had cost her, in doctors' fees, nearly one thousand dollars.

The usual methods of effecting the removal of the tonsils, are by the ligature and the knife.

The first method is unaccompanied by the danger of hemorrhage, but every modification of this plan is excessively painful. It is, also, not free from the liability of causing suffocation, particularly in the very cases where the operation is most necessary; that is, where suffocation is threatened by the disease itself. In many of these instances, it is positively inadmissible. The pain occasioned by this process is, by no means, a small objection to it. There is no charge made against the character of a surgeon more dishonorable to him, than inhumanity in the wanton and brutal infliction of unnecessary pain. It would be an improvement in this branch of our profession, to rob every operation of its horror, and obtain the same splendid and salutary results without the agony and the danger which now necessarily accompany, in a greater or less degree, almost every surgical operation.

There are other objections to the use of the ligature in the removal of elongated tonsils. Several days elapse before each tumor sloughs away, and is removed from the throat. During the time that the putrescent mass occupies the fauces, an unhealthy and fetid fluid distils from it, and is liable to pass into the stomach, particularly during sleep. It injures digestion, and destroys, for some time, the health and comfort of the patient. Another inconvenience results from the ligature. The application, if made tight at once, is not capable of destroying the vitality of the whole mass. A considerable depth of surface is killed, and the absorbents remove it; but there remains still, in the centre, a projecting body, which it had been better to have removed at once, if possible, as it may still be the occasion of irritation, or the seat of future inflammations and disease.

The second method, by the knife, is less painful ; but the danger of hemorrhage from the use of an unguarded bistoury, in a vicinity so vascular as the throat, agitated, too, during an operation, by involuntary spasm, and where a ligature cannot be applied, though authorized by Bertrandi, and successfully practised by Dupuytren and others, is still by many, and, perhaps, the majority of the profession, very properly condemned. Fatal results have occurred from it, and I have been told by two gentlemen who have used it, that in both cases the actual cautery (a most horrid and objectionable expedient, especially in the throat) was the only thing which, in their opinion, prevented a fatal hemorrhage.

In consequence of objections to the usual methods of removing tonsils, several ingenious instruments have been introduced in order to apply the knife without injury to the adjoining parts. One of these, invented by the venerable and judicious Dr. Physick, is communicated in the American Journal of Medical Science, for February, 1828. Dr. Caleb B. Mathews, in the American Medical Recorder for April of the same year, has given to the profession another most ingenious apparatus. It is not my intention to institute a comparison between these instruments and my own. They both obviate one great objection to the unguarded knife. The operation with them secures the truncation of the tumor, which is the proper method, while the surrounding parts are protected from any inadvertent injury. But whoever seizes the tumor with a hook, and proceeds to remove it with an unguarded bistoury, besides endangering the neighboring parts, will be likely to extirpate the whole gland, and thus necessarily cut the trunk of the artery which supplies it, before it has begun to ramify in its substance. Hence copious hemorrhage will necessarily result, and the actual cautery must be used.

There is one aspect in which the instruments, before alluded to, appear to me somewhat objectionable. They both take from the hand of the surgeon the proper guidance of the knife, and commit it to the operation of machinery. There are many possibilities in surgery which may require the motion of the knife to be modified in direction, force, &c., and to me it appears that no human contrivance can ever suit so admirably all the emergencies that may occur in an operation as the hand of the surgeon. It is therefore desirable, in the introduction of new surgical instruments, to supersede as little as possible the use of that divine invention, the human hand.

Dr. Mathews does not say that he has performed any operation with his instrument ; and though constructed on correct principles, it may, from a variety of causes, be utterly useless in practice. It is always desirable to know whether a new invention can be used ; and this can never be absolutely decided, until it has been tried. The ligature has never but once been used by me in this case, and such was the suffering endured by my patient, as to induce me to attempt some less painful means. The result of a great deal of attention to this subject is now submitted to the profession in the instruments of which a description is annexed. More than forty operations enable me to recommend them with confidence for their practical utility ; and though several were performed with defective apparatus, yet there has never occurred anything to weaken my confidence in the plan. Every operation has succeeded, and, indeed,

has given instant relief. There has been no hemorrhage, nor have I ever been *obliged* to use astringents.

A few cases will, perhaps, best illustrate the facility with which relief can be afforded to the patient suffering with enlarged tonsils.

CASE I.—I was called by S. F. Randolph, Esq., April 26, 1828, to see a relative of his from the country, a boy of nine years old, whose tonsils completely filled the throat, pressing forward the uvula. The usual symptoms were all present, and he had not for three months been able to swallow a mouthful of animal food. His general health was still unimpaired. For the first time, I used my instrument, in the presence of Dr. Alexander H. Smith, formerly my student; and Dr. Seaman. The right tonsil was included in the ring, and completely filled it. The knife was made to follow the groove, and the tumor, as large as a pigeon's egg, was thus cut through without delay or difficulty. The operation was but momentary, and the little patient assured us that it was not painful, and complained only of the presence of the instrument in his throat, which induced efforts to vomit. There was only a little bloody saliva discharged. His breathing was immediately relieved, and he partook of animal food at dinner for the first time in a quarter of a year. No medicine or restraint whatever was directed, or at all necessary.

On the 29th, I removed the other tumor, in presence of Dr. C. C. Blatchly. Deafness, unnatural voice, difficulty of swallowing and breathing, and habitual sore throat, have, by this simple process, been immediately and permanently relieved.

CASE II.—On the 30th December, 1828, I was called to see a son of the Rev. Joshua Leavitt, of this city. He had large tonsils, which filled his throat, and for four years had prevented him from the use of animal food, a circumstance the more unfortunate, as he was of a scrofulous diathesis, and was rendered nervous and delicate by this privation. He labored under all the usual symptoms of this disease in an aggravated form. His father had consulted the late Dr. Nathan Smith, of New Haven, who declined the use of the ligature from the extreme delicacy of the child's constitution, and the severity of that operation. I removed the tumor on the right side in a few seconds, in the presence of Dr. Gilbert Heston. There was no hemorrhage. The little fellow (being a politician) fixed the fourth of March for the removal of the other swelling. In the meantime, his father called on me to give me this information, and stated that such was the relief his son had experienced from his former severe suffering, that were it necessary to its continuance, he would willingly subject him to the operation every month as long as he lived. On the day fixed for the removal of the second tumor, Drs. Baily, Tomlinson, Torrey, and Ives, were present. It was done in a few seconds, and the tumefaction having subsided since the first operation, it bled two or three drachms. This has been invariably the case in removing the second tumor. The irritation occasioned by the presence of the first being taken away, the other gland diminishes in size from absorption of the matter deposited during inflammation in its cells. The vessels bleed more freely, because the removal of this interstitial deposit permits the expansion of their mouths. It was very surprising to me to observe no hemorrhage from the largest and reddest tumors,

while the smaller were invariably both more difficult to cut, and discharged more blood; but on a little reflection it appears to be natural and easily accounted for.

CASE III.—February 24th, 1829. I was called by my friend, Dr. Downs, to see a little boy not five years old, son of Mr. Townsend, near the Dry Dock. He had been nearly his whole life subject to swelled tonsils, and had suffered severely from them, but was thought by his friends to be in danger of immediate suffocation during the preceding night. The tumors not only filled the throat, but pushed forward into the mouth. I removed the right tumor in the presence of Dr. Downs and Dr. Marvin. He was immediately relieved, and his throat on that side appeared unobstructed. On the 27th, I was sent for to see him; suffocation again threatened him. I found another tumor occupying the place from which the first was taken. It was removed with immediate and permanent relief. It is evident that in this case the tumefaction had separated each tumor into its two lobes. The anterior lobe was forced forward on each side, and the posterior one backward, because there was no room for them to swell across the throat, or in any other direction; hence they were torn to their base, and divided into two. After the first operation, the posterior lobe was out of sight for some time, and when removed it bore the mark of having passed three quarters of an inch down the throat beyond its base. On the removal of the first, this came forward in one of the violent efforts of the parts, and occupied its place, occasioning the return of all the severer symptoms. From this case I have been led to draw two inferences: first, that the unavoidable tumefaction produced by a ligature would have caused death by strangulation; and second, that an unguarded knife where the tumors were so low down and the mouth and throat so exceedingly small, would have been not only highly dangerous, but almost certainly fatal. On the 13th of March, I removed at one operation the two tumors formed by the separated lobes of the tonsil of the left side. They were taken away together, and were much smaller than in the former cases. They bled more than the first, but not more than two drachms were lost. I saw this patient in July; he was quite a different child; from a puny and delicate boy, remarkably small for his age, as he was in the winter, he had become uncommonly robust and healthful in his appearance, and his parents say that the operation constitutes an era in his life, since which he has been as remarkable for entire health, as he was before for the entire want of it.

Description of the Instruments.—The apparatus consists of several oval rings of different sizes, all adapted to a common handle, and two knives; to each ring is soldered a silver stem of one inch in length, with a screw at its extremity, by which it is attached to the handle. The stem and handle make an obtuse angle with the plane of the ring, and are thus prevented from interfering with the motion of the knife during the operation. On one face of the ring is a dovetailed groove, having the aperture widened near the stem, to admit the beak of the knife, which slides easily along the groove, from which it cannot be extracted at any other part.

The knives resemble each other, with the difference that the beaks are placed on the opposite sides of the blade. They are of the same length

with the other instrument, viz. about seven inches. The handle and blade are of equal lengths; the cutting edge extends about an inch and a half from the point, and is concave. The beak consists of a small piece of steel, of the shape of a pin's head, attached at right angles by a screw to the side of the end of the knife, and is adapted to move easily in the groove on the face of the ring.

Directions for Performing the Operation.—In performing the operation, the first object is to ascertain which ring will most exactly receive the tumor; this to be screwed to the handle. The patient to be seated in a good light. The surgeon requires no spatula to depress the tongue. The ring may be used for this purpose until the tumor is seen. It should be then applied round it, taking care to keep the grooved face towards the cavity of the throat; then taking the knife whose beak is properly situated for the side on which he operates, the operator introduces the beak into the wide part of the groove. The knife should then be passed along the groove firmly upwards and onwards, till it reach the opposite side of the ring, when its point must be pressed downwards, and thus round towards its starting place. The tumor falls into the mouth, and, by a little adroitness, may be brought out with the instruments.

The Scissors are for removing the extremity of the elongated uvula, and are decidedly the best instrument for the purpose. A plate of a similar pair may be found in Cooper's First Lines of Surgery, vol. 1, p. 528, New York Edition.

It is due to the ingenious artist, to whose skill and perseverance so much of the success of this invention is owing, to state that, after an assurance from several, of the absolute impracticability of making the instruments, owing to the difficulty of turning the rings, they were first perfected by Mr. John Wiegand, then of New York, since removed to Philadelphia. The workmanship has been universally pronounced, by competent judges, to be at least equal to anything of its kind.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 2, 1834.

DEATH OF DR. JAMES JACKSON, JR.

DIED, in this city, on Thursday last, at the house of his father, Dr. JAMES JACKSON, JR. at the age of 24 years. In the premature death of this excellent young man, are blighted such hopes and anticipations of future usefulness and eminence, as few are permitted to inspire. Dr. Jackson, from the commencement of his medical studies, has been remarked for the zeal and peculiar singleness of purpose and feeling with which he devoted himself to the profession he had chosen. At a time of life when few can resist the temptation to mingle with their more serious pursuits some portion of amusement and gaiety, surrounded by the attractions of refined and polished society, and relieved from that immediate stimulus of necessity which with the greater portion of us becomes the main spring of effort, he seemed already to have devoted all the

affections of his soul, all the energies of his mind, to the single purpose of accomplishing himself in that noble science, for the acquisition of which, the constitution of both had eminently fitted him. His devotion to study during his novitiate was not more remarkable, than the calm and deliberate judgment which he brought to his investigations, the practical character of the results he obtained, and the liberal and enlarged view which he took of the nature of the profession and of the duties which it involved. His was not a spirit which would bow itself down to servile imitation, or consent to pursue the dull round of mere routine practice. How many are there, both of his seniors and his cotemporaries, who will recall with deep interest that union of ardent zeal and unaffected modesty which marked his manner! Few will forget, who have seen him, with what earnest attention he would assist at pathological examination; ever the most forward to render service and gain knowledge—ever the most diffident, even of the young, in expressing opinion or questioning the conclusions of those, whose age and rank entitled them to precedence and respect.

After passing the usual period of preparation here, he went abroad to complete his studies, and was in Paris till the spring of 1832, when the cholera commenced its frightful ravages in that city. With that peculiar indifference to all amusement or pleasure that could interfere with the performance of duty which ever distinguished him, he determined at once to sacrifice all other considerations, and give himself wholly to the investigation of a subject which circumstances at that time rendered so peculiarly interesting and important. He entered the *Hopital de la Pitié* as an élève; and with what industry and perseverance he devoted himself to the study of this terrible disease, his work on the subject, already known to the profession, will attest. Here, as is supposed by his friends, commenced or was aggravated that peculiar irritability of the intestinal canal which pursued him ever afterward. He however escaped the cholera, quieted the anxious solicitude of his friends on this point, completed his course of studies in France and England, and returned home after little more than two years of absence.

During the last summer he visited the hospital and pursued his pathological investigations, apparently in good health. Still retaining the character of a medical student, he prepared to commence the course of lectures at the College in October, when, without apparent cause, he was attacked with fever. It proved a slow and tedious typhus, with diarrhœa, and confined him to the house for near three months. In February he was convalescent, and about the middle of the month he received his medical degree and resumed his attention to the practical duties of the profession. His exertions at this time were probably premature, and made without sufficient regard to the feebleness of his system. He was soon made sensible of his imprudence by a new attack of bowel complaint, which now took the form of dysentery. Under this his strength rapidly declined; and after a short but painful struggle with the disease, he finally sank. The mildness and patience with which he endured his sufferings, and the calmness in which he resigned his spirit, are sources of consolation to those bereaved friends to whom his gentle and amiable disposition had already so endeared him. But into the privacies of domestic grief, it is not our wish to intrude. The sympathies of that profession of which he seemed destined to be an ornament, follow him to the grave; and society mourns in him one who seemed to have been marked out, as a fit instrument, in the hands of Providence, to control the ravages of disease and to alleviate the sufferings of humanity.

LUNATICS IN NEW YORK.

At a late meeting of the New York Medical Society, the subject of lunacy was under consideration. It was ascertained that the number of lunatics and idiots in the State amounted to about *three thousand*, that about three-fourths of these are poor, and that the Asylum at Bloomingdale, and the private retreat of Dr. White of Hudson, can accommodate at most but three hundred—thus leaving about two thousand seven hundred of these wretched beings, in that single State, almost entirely destitute of medical or moral treatment, confined in poorhouses or jails, or private abodes, or wandering about the country, and treated, too often, more like brutes than human beings. This is indeed a melancholy picture; and when we refer to the records of our well-managed asylums, and see how all are treated with kindness, and how many have their reason restored to them, we cannot but believe that the Legislature of New York will respond cheerfully and speedily to the call of the Society for money to erect a suitable edifice for the reception and treatment of these unfortunate beings.

The Legislature of the State of Maine has established, at its recent sitting, a noble example in this species of beneficence. It has appropriated 20,000 dollars for the establishment of an asylum for the insane, on the condition that other 20,000 dollars shall be raised by private subscription. A single individual in that State promptly subscribed half this sum, and no doubt can exist that the remainder will be speedily obtained.

Probably there is no department of science, no form of humanity, in which greater advances have been made of late years, than in the medical and moral management of the insane. When we contrast the spacious and airy apartments and grounds of our asylums, with the dark, and narrow, and dirty cells, in which, twenty years ago, the best accommodated of these poor creatures were immured—their neat and comfortable dress, with their former rags and nakedness—their wholesome food, with their former rations—and above all, the kindness and affection which is shown to them now, with their utter neglect in the days when they were excluded from the privileges and the society of men, we find ourselves shuddering at the thought of what we *have seen*, and lost in admiration of what we *now see*.

Wherever the christian religion exists, we find the same rapid advances making towards the accomplishment of the great purposes of humanity. It seems as if the miracles of our Saviour were meant as prototypes of what his religion was to accomplish. It is by the influence of this religion on the march of science and philosophical discovery, that, by all christian nations, the winds and the waves have been rebuked—that man is enabled to ride out the storm upon the ocean, as if it were hushed, and, like Peter of old, to walk upon the sea as on dry land. Institutions, too, throughout christendom, are either already established or fast rising up, where the blessings of sight are bestowed upon the blind, and of hearing upon the deaf;—where the dumb are made to speak—lepers are cleansed, the sick are healed, the lame are made to walk, the maimed restored to their integrity, and where evil spirits even are cast out, and the poor lunatic receives back again his lost reason.

Among the improvements in the mode of managing the insane, that have been recently adopted with marked success, we have been particularly impressed with the wisdom of the plan which furnishes them *employment*. Among the numerous inmates of our asylums, we apprehend there are few who have always been accustomed to regular bodily

labor, and the degree of mental action that is usually required by occupations of this description. Employment is the door that keeps health in the body and reason in its proper abode. Take it away, and the one will certainly take its flight, and the other be not unlikely to follow. It seems rational, therefore, that when the means resorted to in the treatment of the insane, have, to a certain degree, been successful, the furnishing such occupation as has a plain and palpable object is a wise and promising measure. A familiar account of its adoption in Europe will be found in the following extract from one of the letters of Mr. Willis.

"Two of the best conducted lunatic asylums," says he, "in the world, are in the kingdom of Naples—one at Aversa, near Capua, and the other at Palermo. The latter is managed by a whimsical Sicilian baron, who has devoted his time and fortune to it, and, with the assistance of the Government, has carried it to a great extent and perfection. The poor are received gratuitously; and those who can afford it, enter as boarders, and are furnished with luxuries according to their means.

The hospital stands in an airy situation in the lovely neighborhood of Palermo. We were received by a porter in a respectable livery, who introduced us immediately to the old baron—a kind-looking man, rather advanced beyond middle life, of manners singularly mild and prepossessing. '*Je suis le premier fou*,' said he, throwing his arms out, as he bowed on our entrance. We stood in an open court, surrounded with porticoes and lined with stone seats. On one of them lay a fat indolent-looking man, in clean grey clothes, talking to himself with great apparent satisfaction. He smiled at the baron as he passed, without checking the motion of his lips, and three others standing in the door-way of a room marked as the kitchen, smiled also as he came up, and fell into his train, apparently as much interested as ourselves in the old man's explanation.

The kitchen was occupied by eight or ten people all at work, and all, the baron assured us, mad. One man of about forty, was broiling a steak with the gravest attention. Another who had been furious till employment was given him, was chopping meat with violent industry in a large wooden bowl. Two or three girls were about obeying the little orders of a middle-aged man, occupied with several messes cooking on a patent stove. I was rather incredulous about his insanity, till he took a small bucket and went to the jet of a fountain, and getting impatient from some cause or other, dashed the water upon the floor. The baron mildly called him by name, and mentioned to him, as a piece of information, that he had wet the floor. He nodded his head, and filling his bucket quietly, poured a little into one of the pans, and resumed his occupation.

We passed from the kitchen into an open court, curiously paved, and ornamented with Chinese grottoes, artificial rocks, trees, cottages and fountains. Within the grottoes reclined figures of wax. Before the altar of one, fitted up as a Chinese chapel, a mandarin was prostrated in prayer. The walls on every side were painted in prospective scenery, and the whole had as little the air of a prison as the open valley itself. In one of the corners was an unfinished grotto, and a handsome young man was entirely absorbed in thatching the ceiling with strips of cane. The baron pointed to him and said he had been incurable till he had found this employment for him. Everything about us, too, he assured us, was the work of his patients. They had paved the court, built the grottoes and cottages, and painted the walls under his direction. The secret of his whole system, he said, was employment and constant kindness. He had usually about one hundred and fifty patients, and he dismissed upon an average two-thirds of them quite recovered.

We went into the apartment of the women. These, he said, were his worst subjects. In the first room sat eight or ten employed in spinning, while one infuriated creature, not more than thirty, but quite grey, was walking up and down the floor, talking and gesticulating with the greatest violence. A young girl of sixteen, an attendant, had entered into her humor, and with her arm put affectionately round her waist, assented to everything she said, and called her by every name of endearment while endeavoring to silence her. When the baron entered, the poor creature addressed herself to him, and seemed delighted that he had come. He made several mild attempts to check her, but she seized his hands, and with the veins of her throat swelling with passion, her eyes glaring terribly, and her tongue white and trembling, she continued to declaim more and more violently. The baron gave an order to a male attendant at the door, and beckoning us to follow, led her gently through a small court planted with trees, to a room containing a hammock. She checked her torrent of language as she observed the preparations going on, and seemed amused with the idea of swinging. The man took her up in his arms without resistance, and laced the hammock over her, confining everything but her head, and the female attendant, one of the most playful and prepossessing little creatures I ever saw, stood on a chair, and at every swing threw a little water on her face as if in sport. Once or twice the maniac attempted to resume the subject of her ravings, but the girl laughed in her face and diverted her from it, till at last she smiled, and dropping her head into the hammock, seemed disposed to sink into an easy sleep.

We left her swinging, and went out into the court, where eight or ten women, in the grey gowns of the establishment, were walking up and down, or sitting under the trees, lost in thought. One, with a fine intelligent face, came up to me and curtsied gracefully without speaking. The physician of the establishment joined me at the moment, and asked her what she wished. 'To kiss his hand,' said she, 'but his looks forbade me.' She colored deeply, and folding her arms across her breast, walked away. The baron called us, and in going out I passed her again, and taking her hand, kissed it and bade her good-by. 'You had better kiss my lips,' said she, 'you will never see me again.' She laid her forehead against the iron bars of the gate, and with a face working with emotion, watched us till we turned out of sight. I asked the physician for her history. 'It was a common case,' he said. 'She was the daughter of a Sicilian noble, who, too poor to marry her to one of her own rank, had sent her to a convent, where confinement had driven her mad. She is now a charity patient in the asylum.'

The courts in which these poor creatures were confined, opened upon a large and lovely garden. We walked through it with the baron, and then returned to the apartments of the females. In passing a cell, a large majestic woman, striding out with a theatrical air, commenced an address to the Deity, in a language strangely mingled of Italian and Greek. Her eyes were naturally large and soft, but excitement had given them additional dilation and fire, and she looked a prophetess. Her action, with all its energy, was lady-like. Her feet, half covered with slippers, were well formed and slight, and she had every mark of superiority both of birth and endowment. The baron took her by the hand with the deferential courtesy of the old school, and led her to one of the stone seats. She yielded to him politely, but resumed her harangue, upbraiding the Deity, as well as I could understand her, for her misfortunes. They succeeded in soothing her by the assistance of the

same playful attendant who had accompanied the other to the hammock, and she sat still, with her lips white and her tongue trembling like an aspen. While the good old baron was endeavoring to draw her into a quiet conversation, the physician told me some curious circumstances respecting her. She was a Greek, and had been brought to Palermo when a girl. Her mind had been destroyed by an illness, and after seven years' madness, during which she had refused to rise from her bed, and had quite lost the use of her limbs, she was brought to this establishment by her friends. Experiments were tried in vain to induce her to move from her painful position. At last the baron determined upon addressing what he considered the master-passion in all female bosoms. He dressed himself in the gayest manner, and, in one of her gentler moments, entered the room with respectful ceremony, and offered himself to her in marriage ! She refused him with scorn, and with seeming emotion he begged forgiveness and left her. The next morning, on his entrance she smiled—the first time for years. He continued his attentions for a day or two, and after a little coquetry, she one morning announced to him that she had reconsidered his proposal, and would be his bride. They raised her from her bed to prepare her for the ceremony, and she was carried in a chair to the garden, where the bridal feast was spread, nearly all the other patients of the asylum being present. The gaiety of the scene absorbed the attention of all ; the utmost decorum prevailed ; and when the ceremony was performed, the bride was crowned, and carried back in state to her apartment. She recovered gradually the use of her limbs, her health is improved, and excepting an occasional paroxysm, such as we happened to witness, she is quiet and contented. The older inmates of the asylum still call her the bride ; and the baron, as her husband, has the greatest influence over her.

While the physician was telling me these circumstances, the baron had succeeded in calming her, and she sat with her arms folded, dignified and silent. He was still holding her hand, when the woman whom we had left swinging in the hammock, came stealing up behind the trees on tiptoe, and putting her hand suddenly over the baron's eyes, kissed him on both sides of his face, laughing heartily, and calling him by every name of affection. The contrast between this mood and the infuriated one in which we had found her, was the best comment on the good man's system. He gently disengaged himself, and apologized to his lady for allowing the liberty, and we followed him to another apartment. It opened upon a pretty court, in which a fountain was playing, and against the different columns of the portico sat some half dozen patients. A young man of eighteen, with a very pale scholar-like face, was reading Ariosto. Near him, under the direction of an attendant, a fair, delicate girl, with a sadness in her soft blue eyes that might have been a study for a *maler dolorosa*, was cutting paste upon a board laid across her lap. She seemed scarcely conscious of what she was about, and when I approached and spoke to her, she laid down her knife and rested her head upon her hand, and looked at me steadily, as if she was trying to recollect where she had known me. 'I cannot remember,' said she to herself, and went on with her occupation. I bowed to her as we took our leave, and she returned it gracefully but coldly. The young man looked up from his book and smiled, the old man lying on the stone seat in the outer court rose up and followed us to the door, and we were bowed out by the baron and his genteel madmen as politely and kindly as if we were concluding a visit to a company of friends."

LACERATION OF THE LIVER.

Mr. JOHN JACKSON, surgeon, of Glasgow, relates the following case :— This afternoon (8th June, 1833) I was called in a hurry to visit A. F., aged four years, who had been, a few minutes previously, jammed against a stone wall, by the fram of a cart that was loaded with spirits. This accident happened as the carter was attempting to turn the cart in a close, while the girl was passing. I found her lying in bed, pale and ghastly ; pulse gone and lower extremities deadly cold. Complained of acute pain when the belly was slightly pressed. Had vomited a wheyish-colored fluid. With the exception of some abrasion of cuticle of right arm, not the slightest injury could be detected. Warm toddy was administered and warm bottles were applied to the feet. Had a stool (free from blood) shortly after my arrival. She died one hour after the accident, without any reaction having taken place.

Inspection.—No external marks were seen in addition to those mentioned. Abdomen much distended. A quantity of liquid blood escaped, when this cavity was laid open. On the right side a great quantity of dark-colored blood resembling tar was seen. On removing this with the sponge, the right lobe of the liver was found lacerated through its entire substance, and separated into several large portions. This, it was evident, was the source from which the blood had escaped. The quantity of blood extravasated, was about two pounds. The other viscera of the abdomen were natural. The ribs were entire. The heart was empty. The lungs were healthy. The head was not allowed to be inspected.

Remarks.—When I saw this girl, it was my opinion that internal hemorrhage had taken place from the rupture of some viscus of the abdomen ; and that this viscus was neither the stomach nor intestines. This appeared to me to be indicated by the deadly pallor of the face and lips, the total absense of pulse, the coldness of the inferior extremities, and the acute pain of the abdomen on pressure. That the organ injured was neither the stomach nor intestines, I concluded, from the matter vomited and passed by stool containing no blood. Further, this case is an excellent illustration of the fact, that rupture of the liver may be produced by a blow without any apparent alteration of the superjacent parts.

Glasgow Medical Journal.

The Influence of Bathing upon the Urine.—M. Braconnot has remarked that the urine voided immediately and even for some time after bathing in a river, is inodorous, colorless, as insipid as pure water, and does not effect litmus. Oxalate of ammonia, caustic potass, and carbonate of potass, which yield more or less precipitate with common water, do not produce any change in the limpidity of this urine. Lime water forms a slight cloud ; nitrate of silver produces a very trifling precipitate, analogous to what the same re-agent causes in well-water. Allowed to stand some days in an open vessel at a temperature of 23 deg. or 25 deg. Reaumur, it does not undergo any putrefactive process. Analyzed, however, with care, it yields all the elements of ordinary urine, but in considerably less proportions. For example, it gives four one-thousandth of solid matter ; whereas, according to Berzelius, natural urine yields sixty-seven one-thousandth.

It is not on coming out of the bath only that the urine presents this change, for similar differences may be observed in it after the person has

been exposed some time to a cool, moist atmosphere, as after a morning walk on the banks of a river, or after remaining some time in a cavern.

M. Braconnot attributes these phenomena less to the absorption of the circumambient moisture than to the suspension of the cutaneous transpiration, the accumulated materials of which have found this excretory passage.—*Revue Médicale*.

Best Method of Applying Leeches.—M. Mojon, of Genoa, recommends that cupping-glasses be used for applying leeches; six or eight of them should be put into one glass, and when partial exhaustion is effected by the usual process, the animals, for want of air, will by a sort of instinct attach themselves instantaneously to the elevated skin.—*Med. Gaz.*

Medical Books in England.—There were 66 works on subjects of medical science published in England during the year 1833.

Medical Degrees.—At the University of Maryland on the 20th inst. Medical Degrees were conferred on fifty-six Students, and seven Honorary Degrees were awarded.

The Communications on "Acute Rheumatism" and on "Amnesia and its Consequences," and a reply to the query of a correspondent in our last respecting Spinal Diseases, have been duly received, and will be attended to without delay. We also acknowledge the receipt of a copy of the "Outlines of Human Physiology," and will notice it in our next.

In the present number, and in some of the recent numbers, of the Journal, bills have been enclosed to many of our subscribers, whose early attention to them is respectfully solicited. Some of these accounts have been standing unsettled for years, and it has now become necessary that they should no longer be neglected.

Whole number of deaths in Boston for the week ending March 23, 23. Males, 17—Females, 6.
Of Intemperance, 2—gout, 1—child-bed, 2—infantile, 4—shock, 1—consumption, 5—lung fever, 1—dysentery on the liver, 1—dropsy on the brain, 1—disease of the heart, 1—typhous fever, 1—apoplexy, 1—dropsy, 1. Stillborn, 3.

ADVERTISEMENTS.

MEDICAL INSTRUCTION.

Two subscribers are associated for the purpose of giving a complete course of Medical Instruction, and will receive pupils on the following terms:

The pupils will be admitted to the practice of the Massachusetts General Hospital, and will receive Clinical Lectures on the cases which they witness there.

Instruction, by examination or lectures, will be given in the intervals of the Public Lectures of the University.

On Midwifery, and the Diseases of Women and Children, and on Chemistry	By Dr. CHANNING.
On Physiology, Pathology, Therapeutics, and Materia Medica	By Dr. WARE.
On the Principles and Practice of Surgery	By Dr. OTIS.
On Anatomy, Human and Comparative	By Dr. LEWIS.

For the greater accommodation of the Class, a room is provided in the house of one of the instructors, having in it a large library, and furnished with lights and fuel, without charge to the students.

The Fees will be, for one year, \$100. Six months, \$75. Three months, \$50.

The Fees are to be paid in advance. No credit will be given, except on sufficient security of some person in Boston, nor for a longer period than six months.

Applications are to be made to Dr. WALTER CHANNING, Tremont Street, opposite the Tremont House, Boston.

April 2. 1834

WALTER CHANNING,
JOHN WARE,
GEORGE W. OTIS, Jr.,
WINFELD LEWIS, Jr.

Boston, March, 1834.

SURGICAL INSTRUMENTS.

An assortment of Surgical Instruments for sale at No. 35 Washington Street, five doors south of Cornhill, by A. F. RICHARDSON.

Surgical Instruments made and repaired as above. Orders forwarded will meet with punctual attention.

Feb 19

ap

THE BOSTON MEDICAL AND SURGICAL JOURNAL is published every Wednesday, by D. CLAPP, JR. at 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, post-paid. It is also published in Monthly Parts, on the 1st of every month, each Part containing the weekly numbers of the preceding month, stitched in a cover.—Price \$3.00 a year in advance, \$3.50 after three months, and \$4.00 if not paid within the year.—Every seventh copy, gratis.—Postage the same as for a newspaper.